agri service inc

building healthy soils

Biosolids-

“Manna or Menace?”

Mary Matava - Agronomist,
Agri Service, Inc.

Company Mission

Agri Service Inc.'s mission is to foster sustainable, local communities by providing an economical alternative for the disposal of organic material and to provide consumers with top quality, organic recycled products that reduce erosion and improve the soil.

Agri Service Strategic Goals

- Produce compost and mulches that are appropriate for local growers using feedstocks generated in our area
- Use processes are environmentally sound and “neighbor friendly”
- Make sure that “what comes in, goes out!”

Questions to Ask

- Do we have the current end markets or the ability to develop markets for biosolids?
- Can the ‘perception’ of biosolids be overcome for use on food crops?
- Can we economically develop other products from biosolids, like pellets, for high end use in horticulture and turf applications?

End Products

Compost, mixed with the native soil prior to planting has the following beneficial characteristics:

- Increases water retention by increasing the water holding capacity of the soil
- Increases soil fertility by providing slow release minerals
- Improves soil structure, aeration, and drainage
- Enhances the activity of beneficial microbes

End Products

Mulches are applied several inches thick on top of the soil with the following benefits:

- Create a long term nutrient supply
- Suppress weed growth
- Decrease water usage
- Reduce erosion by wind and water
- Fines filter through soil to provide the same benefits of compost

End Products

Must be economic to the grower, offsetting the need for other inputs and/or increasing productivity.

- Water
- Fertilizer
- Increase in Productivity

Costs to Grower

- Transportation: $6 to $10 per ton
- Spreading: $6 to $10 per ton
- Material: $4 to $10 per ton

Total Cost to Grower at 20 tons per acre:
$320 to $600 per acre

Environmentally Sound Processing

- Uses best available technology for controlling VOC and Ammonia
- Storm Water Control
- Dust Control
- Vector Control
- Odor Control

Environmentally Sound Processing

- Physical Safety
  - Sharps, Glass
- Esthetics
  - Trash Free
- Chemical Safety
  - Pesticides
- Pathogen Free
  - Human and Plant
- Weed free

Things we know

- Today's biosolids are safe to use after processing.
- Today's biosolids, unlike yard trimmings and food waste, are nutrient rich and can provide a slow release form of fertilizer to crops.
- We currently compost only a fraction of the organics from the waste stream.
- “Organic” dumping is already occurring as ADC is reduced in Southern California.
- Transportation is the biggest challenge to market development

Summary

- Do we have the current end markets or the ability to develop markets for biosolids?
- Can the ‘perception’ of biosolids be overcome for use on food crops?
- Can we economically develop other products from biosolids, like pellets, for high end use in horticulture and turf applications?